

CITY OF WEST LAFAYETTE

W E T W E A T H E R P R O G R A M

University Farms Drainage Improvements

Located in northern West Lafayette, the University Farms neighborhood, which is comprised of approximately 580 homes, is within walking distance of Northwest Greenway Trail and Cumberland Park.

Since the neighborhood was developed, homeowners have added landscaping and fencing to their properties to improve aesthetics and privacy. These additions, in combination with clay-like soils and the high water table in the area are preventing proper stormwater drainage.

Standing water in backyards is a chronic problem for residents, and it can result in damage to public and private property, flooded basements, and an unhealthy environment.



Underdrains to Improve Soil Saturation



To improve stormwater drainage in University Farms, the City of West Lafayette is considering various improvements including the installation of underdrains to remove water from saturated soils. Underdrains are perforated pipes buried underground that collect stormwater as it soaks into the ground. The underdrains will allow stormwater to percolate more quickly into the ground and alleviate standing water in backyards.

Infiltration basins also are being considered to improve drainage and provide stormwater quality. Essentially shallow ponds, the infiltration basins will serve as a natural filter, helping to remove pollutants such as oil from cars, trash, and lawn chemicals from the stormwater before it flows into local waterways.

Infiltration Basins to Naturally to Filter Pollutants

Highlights

Project: Drainage improvements

Estimated Project Cost: \$1,200,000

Status: Planning

Project Benefits:

- Improved stormwater drainage
- Reduced flooding in backyards
- Improved quality of stormwater entering the Wabash River

The University Farms Drainage Improvement project is part of West Lafayette's capital improvement program to improve the water quality of the Wabash River and other local streams and to address poor drainage conditions. The projects will reduce chronic flooding and satisfy the requirements of the U.S. Environmental Protection Agency and the Indiana Department of Environmental Management.

